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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/069,419	04/29/1998	SHIGEO YOSHIDA	1232-4440	3366

7590 10/11/2002

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EXAMINER

MOE, AUNG SOE

ART UNIT PAPER NUMBER

2612

DATE MAILED: 10/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/069,419

Applicant(s)  
Shigeo Yoshida

Examiner  
Aung S. Moe

Art Unit  
2612



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Aug 6, 2002
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above, claim(s) 11-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-10, and 30-32 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Apr 29, 1998 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

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## DETAILED ACTION

### *Election/Restriction*

1. Applicant's election with traverse of Species of Figure (1), and claims 1-10 and 30-32 in Paper No. 7 (received on August 06, 2002) is acknowledged. The traversal is on the ground(s) that the two criteria have to meet, for example, (1) the invention must be independent or distinct as claimed and (2) there must be a serious burden on the Examiner if restriction is not required and there is no serious burden in searching and Examining all species.

This is not found persuasive because it is noted that the most recent election/restriction requirement made was in the form of **an election of Species**, not a restriction requirement between more than one invention.

Moreover, the invention elected by the Applicant (i.e., Species of Figure 1) is disclosed in the specification and drawing (i.e., Figs. 1-12) as being embodied in multiple **patentably distinct** embodiments (noted that Figs. 8-12 are respectively directed to different type of system and method for an imaging system). In view of this, the mere evidence of several patentably distinct embodiments is *prima facie* evidence of serious Examining burdens of the Examiner.

Therefore, the requirement is still deemed proper and is therefore made **FINAL**.

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***Drawings***

2. The drawings are objected to because the word "DRIGINAL IMAGE" as recited in step S605 of Fig. 6 should be changed to -- ORIGINAL IMAGE --. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 101***

3. Claim 32 is rejected under 35 U.S.C. 101 because claim 32 recites data embodied on an image recording medium. However, the data does not impart functionality to either the data as claimed or to the system thereof. As such, the claimed invention **recites non-functional descriptive material, i.e., mere data**. Non-functional descriptive material stored on a recording medium is merely carried on the recording medium, it is not structurally and functionally interrelated to the medium. Merely claiming non-functional descriptive material stored in a computer-readable medium (i.e., a recording medium) does not make it statutory, thus, the allowance of such a claim would exalt form over substance.

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***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claim 32 is rejected under 35 U.S.C. 102(e) as being anticipated by Roberts et al. (U.S. 6,094,219).

**Regarding claim 32**, Roberts '219 discloses a computer readable recording medium (Fig. 2) in which data including a photographing mode (i.e., noted the Format/Mode as shown in Fig. 2A) of a photographing apparatus (i.e., noted the camera of Fig. 2) and a size of the image which

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is photographed in said photograph mode has been recorded (i.e., noted the Resolution data is a size of the image as shown in Fig. 2A; col. 5, lines 20+ of Roberts '219).

6. Claims 1 and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Kinoshita et al. (U.S. 5,170,262).

**Regarding claim 1**, Kinoshita '262 discloses an electronic apparatus (i.e., noted the portable camera 1 as shown in Figs. 1/5) comprising: image pickup means (the CCD 4) for photographing an object and outputting an image signal; memory control means (Figs. 1, the element 14) for allowing said image signal to be stored into image memory means (7); and communicating means (Figs. 5 and 8, the elements 25, 26 and 35) for automatically transmitting the image signal stored in said image memory means when a predetermined condition (i.e., when the camera 1 is connected to the external storage device) is satisfied so as to enable a new image signal to be stored into said image memory means (col. 5, lines 35-45).

**Regarding claim 8**, Kinoshita '262 discloses wherein said communicating means is wireless communicating means (col. 5, lines 45+).

**Regarding claim 9**, Kinoshita '262 discloses an image processing method comprising the steps of:

storing a photographed image signal into image memory means (i.e., Figs. 5-9; col. 2, lines 44+); and

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automatically transmitting the image signal stored in said image memory means so as to enable a new image signal to be stored into said image memory means (i.e., col. 5, lines 39-50).

**Regarding claim 10**, Kinoshita '262 discloses a computer readable recording medium in which a program to execute a procedure by the computer has been recorded (Figs. 1-8, the elements 14; col. 3, lines 5+ and col. 6, lines 45+), wherein said procedure comprises the steps of:

storing a photographed image signal into image memory means (i.e., Figs. 5-9; col. 2, lines 44+); and

automatically transmitting the image signal stored in said image memory means so as to enable a new image signal to be stored into said image memory means (i.e., col. 5, lines 39-50).

7. Claim 30 is rejected under 35 U.S.C. 102(b) as being anticipated by Bell (U.S. 4,827,347).

**Regarding claim 30**, Bell ' 347 discloses a computer readable recording medium in which a program to execute by the computer has been recorded (Figs. 4 and 7-10), wherein said program comprises the steps of:

storing an image signal photographed by image pickup means into image memory means (Fig. 9, col. 4, lines 40+, col. 5, lines 5+);

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detecting a remaining amount of said image memory means (as shown in Fig. 9 that the controller 72 is capable of determining the status of the storage means; col. 4, lines 40+ and col. 6, lines 55+); discriminating whether the photographing by said image pickup means can be performed or not on the basis of said detected remaining amount (i.e., as shown in Figs. 9 and 10, that the controller 72 is discriminating the photographing condition of the camera based on the status of the storage means as detected; col. 6, line 40 - col. 7, lines 65);

selecting an image signal (Fig. 10, the step's 514) on the basis of a predetermined selecting condition (i.e., when the storage area of the camera is fully loaded is determined; see Fig. 9) from said image memory means (col. 4, lines 40+) when a result of said discrimination indicates that the photographing is impossible (i.e., Figs. 9-10); and transmitting said selected image signal (i.e., As shown in Figs. 1/10, the image data of the camera may be transmitted to the remote data base 24 via the transmitter 90; col. 5, lines 20+ and col. 7, lines 20+).

8. Claim 31 is rejected under 35 U.S.C. 102(e) as being anticipated by Yamagata (U.S. 6,263,106).

Regarding claim 31, Yamagata ' 106 discloses a computer readable recording medium in which a program to execute by the computer has been recorded (see Figs. 2 and 4-8, 10-11 and 13), wherein said program comprises the steps of:

storing an image signal photographed by image pickup means into image memory means (i.e., Fig. 4; col. 4, lines 50+); detecting a remaining amount of said image memory means (noted



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that Figs. 5/6, 10/11 show that the controller 25 is capable of determining the remaining capacity of the memory card; see col. 2, lines 14+ and col. 7, lines 35+);

discriminating whether the photographing by said image pickup means can be performed or not on the basis of said detected remaining amount (i.e., noted that based on the capacity of the memory card, the controller 25 is capable of discriminating the capacity of the memory Card to perform the photographing and storing of the new image data; col. 1, lines 35+, col. 2, lines 1-40, col. 7, lines 35+);

selecting an image signal (i.e., Fig. 12, the file No. 5) on the basis of a predetermined selecting condition (i.e., the memory card 16 is full) from said image memory means when a result of said discrimination indicates that the photographing is impossible (i.e., see Fig. 10-12; col. 10, lines 15+); and processing (i.e., recompressing) said selected image signal (i.e., Fig. 12, the file No. 5) and supplying the processed image signal to said image memory means (i.e., as shown in Figs. 10-12 that if the controller 25 of the camera is determined that the storage area of the memory card 16 is not enough to store the additional image data, then the previously stored image data, such as low-compression image data of file No.5, from the memory card is selected by the controller 25 so that this selected image data may be recompressed and supplied to the image memory card 16, thus, the remaining capacity of the memory card 16 is increased, and it becomes possible to store additional image data files as shown in Fig. 12).

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***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-2 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hull et al. (U.S. 5,806,005) in view of Kinoshita et al. (U.S. 5,170,262).

Regarding claim 1, Hull '005 discloses an electronic apparatus (i.e., noted the portable camera 10 as shown in Fig. 1) comprising: image pickup means (col. 2, lines 2+) for photographing an object and outputting an image signal; memory control means (22) for allowing said image signal to be stored into image memory means (24); and communicating means (Fig. 1, the elements 22, 26 and 28) for transmitting the image signal stored in said image memory means when a predetermined condition (i.e., the memory 24 is determined to be full; see col. 3, lines 1-20) is satisfied so as to enable a new image signal to be stored into said image memory means.

Furthermore, it is clearly obvious from the system of Hull '005 that the image data stored in the memory (24) may be automatically transmitted, if the memory (24) is determined to be full, Hull '005 does not explicitly state such obvious features, such as automatically transmitting as recited in the present claimed invention. However, such features are well-known

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in the art as clearly evidenced by Kinoshita '262. In particular, Kinoshita '262 teaches that in order to increase the number of recording areas at the camera unit, it is desirable to automatically transmit the image signal stored in the memory of the camera when the camera is connected to the external storage device.

In view of the above, it would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the system of Hull '005 by providing an automatic transmission function as taught by Kinoshita '262, since it has been held that providing a mechanical or automatically means to replace manual activity which has accomplished the same result involves only routine skill in the art. In this case, Kinoshita '262 clearly taught that such a modification would increase the number of recording areas in the camera unit and such features are clearly desired by Hull '005 (i.e., see col. 3, lines 5+ of Hull '005 and col. 5, lines 40+ of Kinoshita '262).

Regarding claim 2, the combination of Hull '005 and Kinoshita '262 discloses further comprising image selecting means (i.e., the command input device 32 of Hull '005; see col. 2, lines 20+) for selecting an image signal from said image memory means on the basis of a predetermined selecting condition (i.e., col. 2, lines 20+ and col. 3, lines 15+ of Hull '005), and wherein said communicating means (i.e., the elements 22, 26 and 28) transmits said selected image signal (i.e., col. 2, lines 20+ and col. 3, lines 16+ of Hull '005).

Regarding claim 7, the combination of Hull '005 and Kinoshita '262 discloses further comprising marking means (i.e., Fig. 1, the elements 22, 32 and 34) for adding a mark to the

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image signal which is outputted from said image pickup means, and wherein said predetermined selecting condition relates to the presence or absence of said marking (i.e., noted from the col. 3, lines 14-33 of Hull '005 that in order to free-up space in the memory 24, the image stored in the memory 24 may be flagged, so that the image presence with flags may be transmitted).

Regarding claim 8, the combination of Hull '005 and Kinoshita '262 discloses wherein said communicating means is wireless communicating means (i.e., noted the Cellular communication of Hull '005 and col. 5, lines 45+ of Kinoshita '262).

11. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hull '005 in view of Kinoshita '262 as applied to claims discussed above, and further in view of Takiyama et al. (U.S. 6,243,108).

Regarding claim 3, the combination of Hull '005 and Kinoshita '262 discloses wherein said predetermined selecting condition is a condition to select an old one of said stored image signals (i.e., noted that the image data stored in the memory of the camera is considered old) in order to free up addition memory space for the storing the new captured images (i.e., see col. 3, lines 20+ of Hull '005).

Further, although the combination of Hull '005 and Kinoshita '262 shows the use of managing means (i.e., the controller of the camera as shown in Fig. 1 of Hull '005 and Kinoshita '262), the combination of Hull '005 and Kinoshita '262 does not explicitly state that the

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photographing times of the image signals stored in the memory is used to manage the stored image data, such as determining whether the stored image is old or new.

However, Takiyama '108 teaches that it is conventionally well-known in the art to use managing means (Figs. 1 and 2, the elements 3, 10 and CPU) for managing photographing times (i.e., col. 3, lines 24+) of the stored image signals for the purpose of determining the condition of the image data stored in the memory of the camera to select the old one the stored image data from the image memory means so that it would increase the storage capacity of the image memory efficiently with the existing memory resources and further provide a free space in the image memory for storing the new image data therein (i.e., Figs. 6, the step's 603, col. 2, lines 14+, col. 3, lines 10-68, and col. 5, lines 20-68).

In view of this, it would have been obvious to one having been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Hull '005 by providing managing means in order to select the old one the stored image data from the image memory means so that it would increase the storage capacity of the image memory efficiently with the existing memory resources and further provide a free space in the image memory for storing the new image data therein as suggested by Takiyama '108.

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12. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hull '005 in view of Kinoshita '262 as applied to claims discussed above, and further in view of Sono (U.S. 5,829,044).

Regarding claim 4, it is clear from the combination of Hull '005 and Kinoshita '262 that the controller (i.e., the CUP 22) is capable of managing the data access frequencies of the stored image signals from the memory means (24) when the image data are either read or written from the image memory means (24) for the purpose of reviewing on the display (30) or transmitting to the remote server (14) to free up the image memory space for the new image data to be stored. In addition, although the combination of Hull '005 and Kinoshita '262 does not explicitly state that the image data stored in the image memory means is selected for transmitting based on the determination that an accessing frequency of the stored image is small. In other word, the images are not view or use frequently may be selected and transmitted to free up the storage capacity of the image memory means. Such limitations are considered obvious over the combination of Hull '005 and Kinoshita '262. For example, the sole purpose for transmitting the selected image data from the image memory (24) to the remote server is to increase the storage capacity of the image memory means (24) at the camera unit (i.e., see col. 3, lines 5+ of Hull '005), thus, it is obvious that if the image memory means (24) is mainly occupied with the images in which are never accessed for viewing (i.e., less frequency), the image memory means (24) may be hindered to store the new captured image data into the image memory means (24).

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In order to overcome the above-mentioned problem, an obvious solution is to remove (i.e., transmit) the less frequently used or access image form the image memory (24) and this is clearly well-known in the art as evidenced by Sono '044. In particular, Sono '044 clearly teaches that it is conventionally well-known in the art to use managing means for managing accessing frequencies of the stored image signals (i.e., see Figs. 2 and 3; col. 5, lines 30+) so that this information may be used to secure the empty area in the storage means by selecting a condition in which an accessing frequency is small from the stored data signals (i.e., col. 7, lines 5-25).

Therefore, having the system of Hull '005 in which clearly suggested that the selected images stored in the image memory means (24) may be transmitted for freeing up the image memory space for the new image data to be stored (i.e., see col. 3, lines 16+ of Hull '005) and then given the well-established teaching of Sono '044 for selecting a data with less accessing frequency to secure the empty area in the storage means, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Hull '005 by providing managing means as taught by Sono '044 to select an image signal in which an accessing frequency is small (i.e., the image data previously stored in the image memory is least recently accessed) from the stored image signals and this would allow the camera user to take as many pictures as desired without worrying about running out of image memory capacity by conveniently securing the empty area in the storage means as suggested by Sono '044.

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*Allowable Subject Matter*

13. Claims 5 and 6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

*Conclusion*

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Novik '871, Aruga '896 and Nishi '313 show a camera having a storage means and control means for determining the storage capacity of the camera memory thereof.

b. Waki '740, Ogino '467 and Fukushima '023 show a camera having an image memory means, communicating means, detecting means and discriminating means for determining the storage capacity and storage condition of the image memory means thereof.

c. Parulski '603 shows a camera having image pickup means, memory control means, an image memory means, and communicating means for transmitting a selected image data to the remote receiver thereof.



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d. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Aung S. Moe** whose telephone number is **(703) 306-3021**. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Wendy Garber**, can be reach on (703) 305-4929.

**Any response to this action should be mailed to:**

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**or faxed to:**

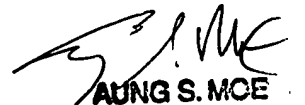
**(703) 872-9314**, (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to  
the customer service number **(703) 306-0377**.

A. Moe

September 26, 2002

  
**AUNG S. MOE**  
**PATENT EXAMINER**